Yoshio ÔTANI*: **On a new species of *Hericium* found in Japan**

大 谷 吉 雄*: サンゴハリタケ属の一新種

The present short paper is intended to report an interesting fungus belonging to the genus *Hericium*, which was collected by the writer at Nara of Japan in October 1956. In Japan, four *Hericium* species, viz. *H. laciniatum*, *H. coralloides*, *H. erinaceus* and *H. caput-medusae*, have been recorded. By the outer appearance they may be devided into two groups: one is the richly branched group (*H. laciniatum*, *H. coralloides*), the other is the solid tubercular fructification group which shows rarely a tendency to form branching processes (*H. erinaceus*, *H. caput-medusae*). This fungus in question belongs to the latter group. This fruitbody grows on the living trunks of *Quercus myrsinaefolia* Blume and attaches rather broadly forming a large spongy mass. It consists of two parts, one is to be said as common base or central cone which is globose or hemiglobose and the other is fertile body which is globose or subglobose in shape and is formed everywhere on the common base developing as secondary outgrowth. So, the mature fruitbody takes an appearance of congregated mass of small globose fruitbodies of *Hericium erinaceus* (Fig. 1, A, B), and younger fructification resembles the inflorescence of cauliflower (Fig. 1, C). These secondary outgrowth is 6–8×3–5 cm large and covered with spines all over the surface. The whole mass is about 18 cm long and 13 cm broad, and salmon-pink or light yellowish-orange in color. The flesh is spongy and fibrillose fleshy, light yellowish-orange, and compact. Spines are acute, subulate and 5–10 mm long. Hyphae are 3–20 μ in diameter, with occasional clamp-connections. Gloeocystidia are cylindrical with capitate apex, 90–104×6.5–8.0 μ (Fig. 2, A), arising from subhymenial region. Basidia are clavate, 28.5–32.5×5.0–6.5 μ, and 4-spored (Fig. 2, B). Spores are subglobose or ovoid, 4.5–6.5×4.5–6.0 μ, hyaline or slightly flesh-colored, smooth, 1-guttulate, non-amyloid (Fig. 2, C).

The present fungus is somewhat related to *H. erinaceus*, *H. caput-medusae* or *H. setosum*. Table 1 presents a comparison between them. As seen from the table, the present fungus is distinguished from *H. erinaceus* and *H. caput-medusae* not only by its appearance and habitat but by its comparatively bright color, rather short spines and by the presence of capitate gloeocystidia. *H. setosum* is similar in color

* Botanical Institute, Faculty of Science, Hokkaido University, Sapporo, Japan. 北海道大学理学部植物学教室.

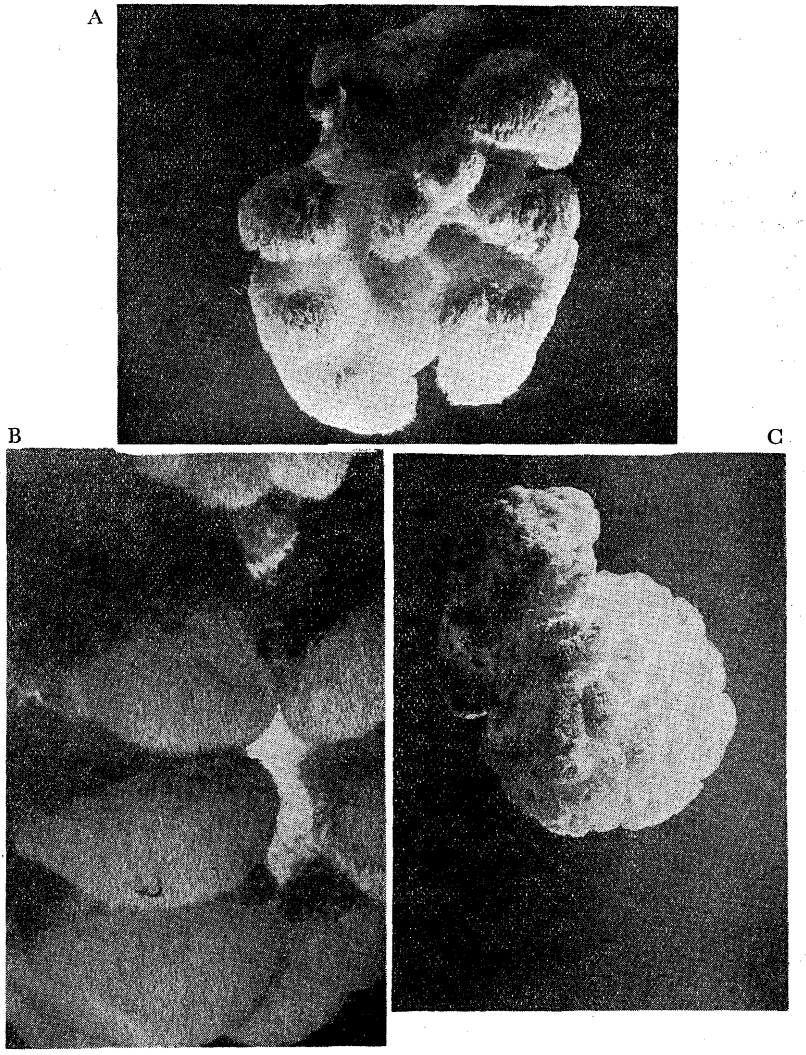

Fig. 1. Fruitbodies of *Hericium botryoides*
A, ×1/4, B, ×1/2, C, rather young plant, ×1/4.

but clearly distinguishable by the absence of gloeocystidia. From these considerations the writer thinks the fungus to be new to science, and prepares a new name *Hericium botryoides* S. Ito et Ôtani, and its latin diagnosis is given as follows:—

Table 1. Comparison between the present fungus and related species

	H. botryoides	*H. erinaceus*	*H. caput-medusae*	*H. setosum*
General appearance	Compound tubercular mass 18×13 cm	Simple tubercular mass, 5–30 cm diam.	Tubercular mass, 7–10 cm diam.	Tubercular mass, stalactiform
Stem	Inconspicuous, rather sessile	Inconspicuous sometimes rudimental	Sub-stipitate	Inconspicuous, broadly effused
Color	Salmon-pink or light yellowish-orange	Whitish, then yellowish	Whitish, then fuliginous-cinereous	Sulphur then flesh color, rufescent on exposure to the sun
Flesh	Light yellowish orange, spongy, fibrillose-fleshy	White, spongy-fleshy, soft	White, fibrillose-fleshy, soft	White, sulphur near the exterior, juicy, firm, sometimes bearing spines inside
Spines	5–10 mm long, subulate, acute, covering all over the surface of small heads	10–60 mm long, straight, hanging downward from the side of the mass, no spines on the upper surface	10–20 mm long, all over the mass, spines on the upper surface distorted, the lower ones straight	3–5 mm long, all over the mass, often fasciculate, intermixed with shorter conical spines
Gloeocystidia	Cylindrical, capitate, 90–104×6.5–7.8 μ	Cylindrical or fusoid, not capitate	Cylindrical or fusoid, not capitate	None
Spores	Subglobese or ovoid, hyaline or slightly flesh colored under microscope, smooth, 4.5–6.5 × 4,5–6.0 μ	Globose or ovoid, hyaline, smooth, 5.5–7.0 μ diam.	Subglobose, smooth, hyaline or light flesh color, 5–6.5 μ diam.	Subglobose, smooth, pale ochraceous, 4–5×3.5–4.0 μ
Habitat	On living trunks of *Quercus myrsinaefolia*	On dead trunks of *Quercus*, *Shiia*, etc.	On dead trunks	On old apple trunks

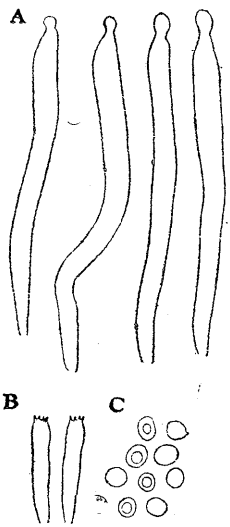

Fig. 2. A, gloeocystidia, B, basidia, C, spores ×500

Hericium botryoides S. Ito et Ôtani, sp. nov.

Spongiosum, in primo tuberculiforme, dein superne multipartitum, conglobatum, imarginatum, 18 cm longum, 13 cm latum, rufo-incarnatum vel aurantium; aculeis 5–10 mm longis, rectis; gloeocystidiis cylindraceis, capitatis, 90–104 μ longis, 6.5–7.8 μ latis; basidiis clavatis, 28.6–32.5×5.2–6.5 μ, tetrasporis; sporis subglobosis vel globoso-ovoideis, hyalino-carneolis, laevibus, 1-guttulatis, 4.5–6.5×4.5–6.0 μ.

Hab.: Ad truncos vivos *Quercus myrsinaefoliae*—Nara, Japonia (Oct. 20, 1956, Y. Ôtani).

Jap. name: Hana-yamabushitake (nov.).

The type specimen is deposited in the Herbarium of the Faculty of Agriculture, Hokkaido University, Sapporo, Japan.

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○ミゾイチゴツナギの一品（檜山庫三） Kôzô HIYAMA: A form of *Poa acroleuca* Steudel

ミゾイチゴツナギ (*Poa acroleuca* Steud.) で稈と葉鞘に逆向する短毛を有するものが稀に見られる（群馬県館林市で1957年春，松沢篤郎氏採集)。これをウスゲミゾイチゴツナギと呼びたい。

Poa acroleuca Steud., Synops. Glum. **1**: 256 (1854).

forma **Matsuzawae** Hiyama, nov. f.

Culmus at vaginae foliorum minute retrorso-pubescentes.—Nom. Jap. Usuge-mizo-ichigotsunagi.

Hab. Hondo: Tatebayashi, prov. Kodzuke (leg. T. Matsuzawa, Apr. 27, 1957—typus in herb. Nation. Sci. Mus. Tokyo).